

# CARVIN BASS KIT ASSEMBLY INSTRUCTIONS

The components in this kit are the same as those used in Carvin's high quality custom shop B4 and B5 basses. All holes are drilled, making it a simple step by step process to assemble your bass. Before you start assembling your bass, check the component check list to make sure that you got everything. It's also a good idea to read the complete instructions before getting started. Have fun!

## KIT COMPONENT CHECK LIST:

Bolt-on bass neck  
Tuning keys  
Body  
Combination bridge & tailpiece  
H50N humbucking bass pickups (2)  
Wiring harness  
K2 knobs  
BP1 rear electronics cover with threaded inserts  
JP1C jackplate  
NP4C neckplate  
E2C strap buttons  
Copper foil shielding & solder  
Carvin bass strings  
TR1 truss rod adjusting wrench

## TOOLS REQUIRED FOR ASSEMBLY

Small slot head screw driver for installing knobs  
Screwdriver with a good quality #1 phillips tip  
Screwdriver with a good quality #2 phillips tip  
Small adjustable wrench for tightening tuning keys  
Wire cutters for cutting strings  
Needle nose pliers for wiring  
Soldering iron for soldering pickup leads  
Hammer for installing threaded back plate inserts

## TUNG OIL (or) GLOSS FINISH

A tung oil finish is by far the easiest method for a novice to achieve his own high quality finish with a minimum of equipment and experience. If you decide to go with a gloss finish, we recommend that you use lacquer as opposed to polyurethane, because lacquer is easier to spray, has faster drying time and reduces dust problems. Lacquer also sands easier between coats and polishes easier. There are several good books, including the "Guitar Player Repair Guide" available in the Carvin catalog with instructions on how to do your own gloss finish.

## MATERIALS FOR YOUR TUNG OIL FINISH

At Carvin we have used and experimented with most brands of tung oil finishes and have found Minwax brand to be the best in every respect. One pint is enough to do a couple of guitars and is available at Home Depot or most home improvement type hardware stores for under \$10. You will also need about 6 sheets of extra fine sand paper (between 220 and 320 grit), a 1" paint brush, about 4 pads of extra fine steel wool (0000), a few small rags and a small bottle of furniture oil (Old English red oil or lemon oil).

## SANDING

Before you start applying the tung oil, you should first thoroughly sand the rounded edges smooth on the top and bottom of the body, so that there are no imperfections. You can do the same for the neck. Before applying the tung oil, blow the fine sanding dust off of the body and neck or use a tack rag to remove the dust.

## APPLYING THE TUNG OIL

Pour a small portion of the tung oil into a small clean container. Immediately replace the cap on the can of tung oil so that the tung oil does not go bad. Take a 1" wide paint brush and apply the tung oil into all of the interior routed holes on the body, including the neck pocket. Now brush the tung oil onto the entire remaining surface of the body and

neck. It is not necessary to coat the ebony fingerboard, although it won't hurt it. If you apply the tung oil onto the fingerboard, wipe off as much of the excess as possible within 5 minutes before it starts to dry. Wipe off the excess on the complete neck or body within 10 minutes. Now let the neck or body dry for at least 5 hours before recoating with more tung oil. You can hang the neck up to dry with a piece of wire through one of the tuning key holes. To hang the body to dry, run a piece of wire or string through one of the neck bolt holes. After the neck or body dries inspect it for sanding imperfections before applying another coat. Sand any imperfections out now with 320 grit sand paper. When applying your 2nd, 3rd, and final 4th coat, it is not necessary to apply tung oil into the neck cavity or control cavity. If you wish, you can also apply these coats with a small rag instead of a brush. Apply these coats fairly heavy, so that they penetrate into the wood pores, but always wipe off the excess within 10 minutes. It is best not to rush the tung oil process. At Carvin, we apply 2 coats of tung oil the first day and 2 coats the next day about 6 hours apart. On the 3rd day you can steel wool your finish to perfection. Rub hard using 0000 grade steel wool on the top and bottom of the body, but don't rub too hard on the sharp edges and corners, because you will rub through the tung oil finish. If you do rub through, you can easily recoat this area and lightly rub it with steel wool after the tung oil dries. After you have inspected your complete neck and body for imperfections, you can wipe on a thin film of (Old English) furniture oil and wipe off the excess. Do not apply the furniture oil in the control cavity area, otherwise the copper foil may have trouble sticking. The furniture oil will bring out a nice sheen in the wood and give your bass a smooth sexy feel.

## NOW LETS BOLT THIS THING TOGETHER

### CARVIN TUNING KEYS

The large tuning key holes going through the headstock are 9/16" and the little holes on the rear of the headstock are drilled 1/16". To install the Carvin tuners, place one tuner into one of the 9/16" holes on the rear of the headstock and finger tighten a washer and nut on the top of the tuning key. Finish installing the remaining tuners. Now line up the small holes in the tuners with the 1/16" drilled holes on the rear of the headstock. Screw in the small #2 x 3/8" long wood screws into the 1/16" holes using a #1 phillips head screw driver. Finish by tightening the nuts with a 5/8" socket or small adjustable wrench.

### STRAP BUTTONS

Use a #2 phillips head screwdriver to install the 2 strap buttons to the body. Make sure that you start the screws straight into the 7/64" drilled holes. Do not over tighten the screws. Just snug them up to the body.

### COPPER FOIL SHIELDING

Line the control cavity with the self adhesive copper foil. Be careful that you do not cut your fingers with the edges of the copper foil. Stick the large contoured piece of copper foil on the bottom of control area first. Then adhere the 1 1/2" wide x 16" long foil onto the sides of the control area. Fold a portion of the side wall foil onto the rear of the body where the rear control covers sits. This will make contact with the aluminum foil underneath the rear electronics cover plate. Make sure that you press the foil tightly onto the wood. At Carvin we use the end of a piece of 3/8" wooden dowel to press the copper down. If the foil ever peels away from the wood, it may cause a temporary short in your bass. Use a knife to cut the copper foil out of the control holes and jack hole area.

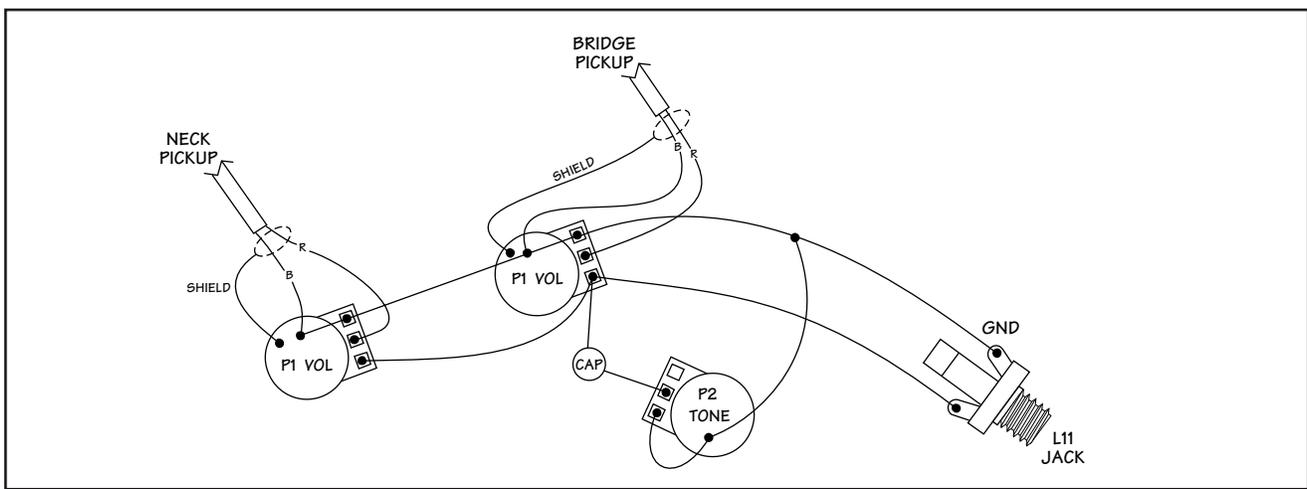


Figure 1. Passive Wiring

## NECK & NECK PLATE INSTALLATION

Install the neck onto the body. Gently slide the neck into the neck pocket of the body. Do not force the neck into the neck pocket or you can actually break the wood on the treble side of the neck pocket. If you painted your body, you may have excess paint build up in your neck pocket. If so take a file or medium grit piece of sand paper and wrap it around a small flat piece of wood. Now carefully remove some of the paint or wood from the inside edges of the neck pocket. Check the fit of the neck frequently so that you don't remove too much material. When the neck fits perfectly into the neck pocket, carefully turn the bass guitar body and neck upside down on a table with a soft towel on it. Take the NP4 neck plate and set it on the body. Carvin waxes the threads of the Four #8 x 1 3/4" wood screws so that they are easier to screw into the hard maple neck. It's important to use a #2 phillips head screw driver with a good tip to prevent rounding out the phillips head screws. Press down hard on the screwdriver while you are securely screwing the screws down. Turn the bass over and check the fit of the neck. If the neck is not snug against the bass side of the pocket, you can slightly loosen the four neck screws and pull the neck over to one side or the other to get the proper alignment. Now firmly tighten the four neck screws while you are pulling the neck to one side or the other.

## HS4C BASS BRIDGE

Before installing the bridge, run the 8" long piece of black colored ground wire through the angled hole leading to the control cavity. Before feeding the ground wire, first take a sharp object and pierce the copper shielding foil that lines the control cavity. The bare end of the ground wire should lay on top of the basses body. Now lay the bridge carefully onto the end of the bare wire and screw the bridge firmly onto the body with a #2 tip phillips head screw driver. Use the two #10 x 1" long wood screws. Wax the screws for easier installation. Note that the bridge mounting holes are elongated. This is to allow the bridge to be adjusted to the right or left for proper centering of the strings over the neck. In most cases you should install the bridge with the screws centered. Tighten the bridge mounting screws firmly.

## JACK PLATE

Screw in the four #2 x 3/8" wood screws until the plate is snug to the side of the body. Use the #1 tip phillips head screwdriver for this.

## PICKUP INSTALLATION

Both pickups in the kit are the same, so it does not matter which one you use for the neck or bridge positions. Before you feed the pickup lead wires through the holes that go to the control cavity you must first turn the bass over and poke holes in the copper shielding foil where the pickup wires enter the control cavity. Each pickup is to be screwed to the body with four #4 x 1" wood screws and four springs. Slip the four screws into the top of one of the pickups, then slide the four springs onto the ends of the screws at the bottom of the pickup. The magnetic field in the pickup will help hold the springs in place while you are slipping the

pickup into the body. Use a #1 phillips head screw driver to screw the four screws into the body. You may damage the pickup lead wire if you screw the pickup too deep into the body. The top of the pickups should be adjusted to stick out of the body 1/2".

## PASSIVE CONTROL INSTALLATION AND WIRING

(For active controls see the active/passive installation instructions). Before installing the wiring harness make sure that the copper foil is sticking to the inside of the control cavity well. Now slide the jack end of the wiring harness into the control cavity first and feed the jack into the hole of the jackplate. Next install the shaft of the tone control into its hole in the body and then install the volume control shafts into their proper holes in the body. Now install a washer and nut on each of the potentiometers and the jack. Firmly tighten all of these nuts with your adjustable wrench while you are holding onto them tightly with your other hand inside the control cavity. This will keep them from spinning and damaging the wiring harness. Use a small slot head screw driver to tighten the knobs onto the shafts of the potentiometers. Install the knobs so that the dimples on the knobs are facing toward the strings while the potentiometers are turned full on. Solder the pickup leads to the volume pots as shown in figure 1.

## BACK PLATE AND THREADED INSERT INSTALLATION

Five #4-40 threaded brass inserts are included with your back plate. Install these into the 5 holes surrounding the control cavity. Install the slotted end of the insert into the hole first. Use a small hammer and lightly tap the inserts flush with the top of the back plate cavity. Make sure that all of the wires are tucked neatly inside the control cavity before installing the rear electronics cover plate.

## STRINGING AND ADJUSTING YOUR BASS

Please refer to the maintenance and adjustment procedures sheet for proper stringing and set up techniques including truss rod, bridge, pickup and intonation adjustments.

## CHECKING THE ELECTRONICS

Plug your newly assembled bass into an amp and make sure that everything is working properly. All standard passive model basses have separate volume controls for each pickup and one master tone control. For basses with active/passive electronics please refer to the active/passive control function sheet.

Enjoy your new bass!

# CARVIN

1-800-854-2235 or [www.carvin.com](http://www.carvin.com)